**Bellman Ford, O(V\*E)**

**Tested on: Uva 558 Wormholes**

bool BellmanFord(int n, int m) //n=node, m=edge

{

int cost[n+5];

bool negativeCycle=false;

cost[0]=0;

for(int i=1; i<n; i++) cost[i]=1e9;

for(int i=0; i<n-1; i++)

for(int j=0; j<m; j++)

if(cost[eg[j].b]>cost[eg[j].a]+eg[j].cost)

cost[eg[j].b]=cost[eg[j].a]+eg[j].cost; //find minimum cost to reach all node from source

for(int i=0; i<m; i++)

if(cost[eg[i].b]>cost[eg[i].a]+eg[i].cost) //less than minimum possible?

negativeCycle=true;

return negativeCycle;

}